

# Louan Flammanc

Effort, PA | (201) 914-1026 | [louanflammanc.pro@gmail.com](mailto:louanflammanc.pro@gmail.com) | <https://gloobinours.github.io/portfolio/>

## EDUCATION:

**Rochester Institute of Technology (RIT), Rochester, NY**

**Expected 2026**

*Bachelor of Science, Software Engineering*

*Related Courses:* Software Dev & Problem Solving, Engineering of Software Subsystems, Web Engineering, Cloud Computing, Software Design for Computing Systems, Software Process & Project Management, Calculus, Discrete Math for Computing, Linear Algebra, Analysis of Algorithms, Statistics

## SKILLS:

**Programming Languages:** Python (SKLearn, Pandas), Java, C, C++, Postgres.

**Cybersecurity:** ProxMox, AWS (Terraform, CloudWatch, Lambda, EC2, S3), Risk Assessment, CI/CD Pipelines.

**Data Analysis:** Machine Learning, Deep Learning, Ensemble Models, PyTorch, LaTeX.

**Tools:** Git, Linux, TMUX, Jupyter Notebooks

## PROJECTS:

*Honeypot Agent for Dynamic Engagement and Sec., Personal Project*

May 2025 - Present

- Cybersecurity system that uses Deep Reinforcement Learning to dynamically deploy and manage SSH honeypots in response to live network threats.
- Designing a **DDPG agent** in **PyTorch** to optimize honeypot deployment based on attacker engagement and resource usage.
- Researching a **reward function** combining attacker behavior metrics and operational cost, using real SSH interaction logs for policy learning.
- Building a **Flask-based** monitoring dashboard showing active honeypots, system status, and real-time visualizations of attacker commands and agent decisions.

*Stock Prediction AI, Personal Project*

October - December 2024

- Developed a predictive model using a **stack ensemble** (XGBoost, AdaBoost, Random Forest, Bagging-LSVM) to forecast stock prices based on historical data.
- Achieved an  $R^2$  of **0.9997** and relative **RMSE** of **0.0013%** on a 33,000-point dataset.
- Integrated Python libraries (**SKLearn**, **Pandas**) for data processing and model evaluation.

*Maze-AI, Personal Project*

August 2024

- Designed a reinforcement learning agent using **Deep Q-Learning** in **PyTorch** to solve randomly generated mazes.
- Optimized the agent's performance through **reward shaping** and **state-action modeling**.

*NUTRiAPP, Engineering of Software Subsystems*

January - April 2023

- Collaborated with a team of 5 to build a nutrition app in Java
- Implemented **core features** using **object-oriented design patterns** and **domain-driven modeling**.
- Presented a **fully functional prototype** that showed off smooth data handling and user interaction.

*Theater Ticket Selling Website, Intro to Software Engineering*

September 2022 - December 2022

- Collaborated with a team to create a ticketing platform using Spring Boot (REST API) and Angular (frontend), PostgreSQL (Database).
- Gained experience in full-stack development and project management.

## WORK EXPERIENCE:

**RIT Catering**

September 2022 - Present

*Attendant*

- Managed the distribution of resources for events, making sure that supply planning and inventory tracking were accurate.
- Adapted to fast-paced environments, collaborating with teams to deliver high-quality service.
- Interacted with customers and ensured a positive environment at the events.

## ACTIVITIES & INVOLVEMENT:

- Member of the Vulnerability Research Team for RITSEC (RIT Cybersecurity Club).
- Competing in hackathons such as IRSeC 2024, focusing on blue teaming.
- HackTheBox, Ranked #809 Globally